A Web-Enabled
Version of
FIREHOUSE Software®

FH Web Support Guide
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CHAPTER I
Requirements

1

FH Web Requirements

Following are the software and hardware requirements for running a FH Web Server. For further instructions, please consult the *FH Web Windows Administrator Guide*.

Server Requirements

Supported FH Web Servers

The Server requires a minimum of 256 MB of RAM, plus 5 MB of RAM per user, plus the memory required by the application(s) deployed via FH Web. The server requires 500 MB of free disk space. The following operating systems are supported:

> Windows 2000 Server or Professional with Service Pack 4

> Windows Server 2003 Standard or Enterprise Edition

Where applicable, these platforms are supported with or without the Security Rollup Package. Right-to-left languages are not supported.

Server Display Settings

The color depth of the client and server must be greater than 256 — 16 million or greater is recommended.

Supported Web Servers

A Web server must be installed in order to deploy FH Web. FH Web supports the following Web servers:

> Microsoft IIS 5.0 or later

CPU and Memory

CPU and memory requirements are determined by the applications that are published and the number of users accessing the system. In general, a FH Web Server can support 6 "heavy" users/1 GHz CPU ("Heavy" is defined as a user running FIREHOUSE Software application with continuous user interaction).

Other Requirements

FH Web requires TCP/IP for network connections. TCP/IP must be installed prior to installation.

FH Web listens on FH Web's registered port 491 for TCP and UDP packets.

FH Web Administrators must have administrative rights on the server.

FH Web Clients

The following FH Web Clients are available:

- **Java Client**
  The Java Client is available to Windows, Macintosh, OS/2, and Linux users. When running from a browser, users launch FH Web by browsing to an HTML page containing the Java applet. The browser automatically downloads the FH Web Client classes and launches the applet.

- **Microsoft ActiveX Control**
  The Microsoft ActiveX Control is available to Windows users running Internet Explorer. The ActiveX Control is automatically installed the first time a user accesses the HTML page containing the ActiveX Control.

- **Windows Client**
  The Windows Client is a 32-bit Windows application that can be installed and run on most Windows computers.

Client Requirements

Clients running the Java Client should set their color palettes to anything less than True Color.

Clients must have TCP/IP installed as a network protocol.

CHAPTER II
Troubleshooting

2

Web Browser Deployment

If you are unable to access the FH Web logon page:

Verify the server name and the logon URL.

Verify that a Web server is installed and functioning properly.

Verify that the client and server versions of FH Web are identical. Clear the browser's memory and disk cache.

Verify that the server port number is correct. FH Web's default port number is 491.

There may be an invalid path on the FH Web Server. The FH Web Program Directory must be in the path. (The fix requires restarting the machine.)

Verify that the Application Publishing Service is running on the FH Web Server.

To verify that the Application Publishing Service is running

1. From the Start button on the Windows taskbar, click Settings | Control Panel or click Settings | Control Panel | Administrative Tools.

2. Double-click **Services**.

3. Find **FH Web Application Publishing Service** in the list of services. Verify that it has "started."

Verify TCP/IP connectivity by pinging the server.

From the client's command prompt window:

Example:
D:\>ping 192.168.100.136
Pinging 192.168.100.136 with 32 bytes of data:
Reply from 192.168.100.136: bytes=32 time<10ms TTL=128
Reply from 192.168.100.136: bytes=32 time<10ms TTL=128
Reply from 192.168.100.136: bytes=32 time<10ms TTL=128
Reply from 192.168.100.136: bytes=32 time<10ms TTL=128

If you are unable to ping the server, perform the following steps on the client machine:

1. Ping 127.0.0.1 (loopback address) If **Yes**, go to step 2. If **No**, verify that the system was restarted after TCP/IP was installed.

2. Ping your IP address. If **Yes**, go to step 3. If **No**, view configuration through the Control Panel Network application. Verify IP address.

3. Ping IP address of Default Gateway. If **Yes**, go to step 4. If **No**, verify IP address and subnet mask.

4. Ping IP address of Remote Host.

Note:	If you are able to ping the loopback adapter, but cannot ping yourself or the network after following the above guidelines, check the Network Interface Card (NIC) or the physical network connection (cabling).

Java Client

If you are unable to access the FH Web logon page:

Verify that the client's browser supports Java 1.4 (1.1.8 on OS/2).

If the logon HTML page has been modified, verify that the applet code is correct.

If the Logon dialog does not appear, enable the Java Console, reload the page, and note any errors.

To enable the Java Console for Internet Explorer

1. Right-click the Internet Explorer icon.

2. Select **Properties** from the shortcut menu.

3. Select the **Advanced** tab.

4. Scroll down to the heading **Java VM**.

5. Check Java Console enabled (restart required).

6. Run Internet Explorer.

7. From the **View** menu, select **Java Console**. This will launch the Java Console. Run the Java Client and note any errors in the Console.

To enable the Java Console for Netscape Navigator

1. In Netscape, click Communicator | Tools | Java Console.

2. Run the Java Client and note any errors in the Console.

Note:	Some clients may be prompted to set their color palettes to anything less than True Color.

Logon to the FH Web Server

Enter the network user name and password into the Logon dialog.

If you are unsuccessful at logging on to FH Web:

Verify that the user name and password are valid.

Verify that the user has a valid account on the network.

Note:	The FH Web Server first attempts to authenticate the user's account on the local machine, followed by the domain of the server machine, and lastly the trusted domains.

Application Launch

Applications are launched from the Program Window by double-clicking the application's icon.

If the Program Windows does not launch:

   Verify that the Application Publishing Service is running.

If an icon does not appear in the Program Window:

   Verify that the client has permission to access the application. (For details, see chapter 3 of the *FH Web for Windows Administrator Guide*.)

   Verify that an application is registered in the Connection Manager.

   There could be an invalid path or start directory in the Connection Manager.

   Verify that there is a license for the application.

If the application does not launch:

   There may be invalid shortcut options or command-line options.

   There may be an invalid path on the server. The FH Web Program Directory must be in the path. (The fix requires restarting the machine.)

Client Printing

Unsupported printers

   FH Web does not support the following printers:
   Lexmark Z and X series ink jet printers (This also includes some Dell Printers Manufactured by Lexmark)
   HP LJ 1000; HP LJ 1150
   HP LJ 3100 Family
   HP CLJ 1500 (color)
   HP DeskJet 930c Series
   All In One Printers and ALL Software Driven Printers

   Some printers require a licensing agreement when they are configured. These types of printers are not supported in FH Web.

   There are also Additional Problems with Drivers on Windows 2000 Server as newer printers may not install properly on this operating system.

Configuration

Client printer configuration data is stored in *print.ini* on the Windows Client, the Java Client, the ActiveX Control. With the ActiveX Control, the file is stored in '\<windows>\downloaded program files in older versions and it's located in C:\Documents and Settings\%username%\Local Settings\Application Data.

Auto-configuration is set to configure the default printer only. When auto-configuration is set to the default, other printers may be configured manually. This parameter can be changed to auto-configure **none** or **all**. If changed, printers that were configured previously will remain configured, as the data will still be stored in the printer configuration file.

When a client printer is auto-configured, the printer driver is automatically uploaded to the FH Web Server as long as **Clients** is enabled as a driver source in the Connection Manager. If **Clients** is not enabled, a driver may not be uploaded from the client. If problems arise, it is usually because the driver cannot be uploaded. Auto-configuration should work if the client and server operating systems are the same. If the client and server operating systems are different, the printer will probably not auto-configure. In this case, try installing the server version of the driver interactively on the FH Web Server and then configure the printer manually through the Program Window. For example, if the client is Windows NT 4.0 and the FH Web Server is running Windows 2000, install the Windows 2000 version of the driver interactively on the server. On the client, in the Program Window, click File | Printers | Configure Client Printer and configure the client printer using the **Client Printer Wizard**.

Manual configuration is done through the Program Window. Click File | Printers | Configure Client Printers. If the driver is not in the known list or if the driver is not installed on the server, you will need to use **Have Disk** in the **Client Printer Wizard**. Please note that **Custom (Have Disk)** must be enabled in the Connection Manager to install a driver from disk. If the Have Disk button is grayed out, it has not been enabled.

When encountering client printing problems, including configuration issues, always check the process log files on the server. You may need to set the log output level to 4 via the Connection Manager's **Server Options** dialog.

Please note that setting the log output value to 4, 5, or 6 will adversely affect FH Web performance. These output levels yield very large files, and should only be used in a controlled environment—preferably when no clients are accessing the FH Web Server. After the problem has been reproduced, you can change the output level back to 1.

If a configuration problem is difficult to ascertain, the appropriate driver can be installed interactively on the server. This will more than likely fix the issue.

Other printing issues:

Some applications require a default printer. If the application is giving an error message instructing you to install a printer, check to see if a printer is configured. In the Program Window, click File | Printers.

For Java Client users, only the signed version supports client printing. Since auto-configuration is not supported with the Java client, printers must be manually configured in the Program Window. If you want to configure client printers, you cannot launch the application directly the first time since this would bypass the Program Window).

On a Windows 2000 Server, combined drivers that are version Windows NT 4.0 or 2000 are not supported. You will need to find a Windows 2000 only driver. Alternatively, we recommend enabling the **Universal Driver** and the **Use as fallback** options via the Server Options dialog of the Connection Manager.

If the printer is producing blank pages or garbage characters, it may be configured with the wrong driver. Check the driver that is being used via the Program Window. Click File | Printers; click on the printer; then click the **Driver** tab.

Printing problems arise when a client runs multiple FH Web sessions on the same FH Web Server using different user names. As such, FH Web denies client printer access to sessions started with a user name that differs from the first session. Clients running multiple sessions with the same user name still have access to client printers.

It is sometimes helpful to see which printer drivers are installed natively (either on the client or on the server).

To determine which printer drivers are installed on a machine

1. Access **Printers** either through the Control Panel, or from the Start menu.

2. Right-click in the white area of the printer window.

3. Select **Server Properties**.

4. Click the **Drivers** tab.

This shows a list of printer drivers and other pertinent information, for example:

Name	Environment	Version
AGFA-AccuSet 800	Intel	Windows 2000

You may also remove and install printer drivers natively in this window. To install a printer driver, click the **Add** button to invoke the Client Printer Wizard.

Log Files

The FH Web Server creates log files for certain FH Web processes. These files are stored in the Log directory and are used to record program errors and events. With this information, GraphOn Technical Support can diagnose and correct problems that may arise. This can be especially helpful for errors that are only reproducible on specific machines or with a specific application.

All log files, whether they pertain to the client or server machine, are located in the **Log** folder on the FH Web Server. For example, D:\Program Files\Affiliated Computer Services, Inc\FH Web Edition Server\Log. In the Log folder you will find HTML files and a Templates folder—do not delete this folder. FH Web messages are recorded within log files prefixed with *aps* and followed by the date and time (to the nearest millisecond) the Application Publishing Service was started. (For example, aps_2005-04-04_09-55-47-636.html). A new log file is created each time the Application Publishing Service is started. The log file with the latest date and time stamp contains messages for the current, or most recent instance of the Application Publishing Service.

Problems detected in the execution of FH Web are described by entries in the log file. Each entry is uniquely identified by an item number along with a date and time stamp, and a description of the event or program error. FIREHOUSE Software Technical Support uses this information to locate a problem's source and to determine its resolution. Entries in the log file may also include prefixes for locating messages associated with an individual user's session and applications. If the event occurred within the context of a given session, the name of the session will appear at the beginning of the message, for example, *SuzyG on Server1*. If the event occurred within the context of a connection to the Application Publishing Service—a connection either from a client or from an application, the name of the connected process will be included in the message prefix, for example, *pw (1244).* In this example, a problem occurred during the connection between the Program Window process and the Application Publishing Service. 1244 is the process ID in which the event took place. If the message prefix contains the connection name *aps*, the event occurred within the Application Publishing Service, but was not associated with a connection to another process.

Error Messages

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Error Messages

FH Web error messages are reported to end-users within a message box.

Client

Error Text	Reason/When it happens
"Unable to create the desktop shortcut."	Registry Key is missing. Under HKEY_LOCAL_MACHINE, "SOFTWARE\\GraphOn\\Bridges," "Client" string and string value are missing.
"The version numbers of the client and server are not the same. Contact your System Administrator."	Different CS module version.
"An argument on the command-line has not been specified correctly."	One of more arguments on the command-line may be invalid or incorrect.
"The -r argument must be preceded by the -a argument. Do you want to continue?"	Occurs if the –r argument is used to open a file without also using the –a argument to specify the application.
"If the argument -r is used, it must be the last argument on the command-line."	–r must be the last argument on the command-line.
"Unable to connect to "". Verify that the server address is correct.	Connection to the host failed because of unknown host name.

Client (continued)

"The application service is not running on "". Contact your system administrator."	• The FH Web Server is not running. • The server is listening on a different port.
"The client and the server are not the same version."	Different CS module version.
"Connection failed. The number of users allowed on the server has already been reached."	The maximum number of sessions setting in the Connection Manager has been reached.
"Connection failed. The server cannot create a new session."	The server was unable to create a new session. Check the log file for details.
"Licensing failure. Please contact your system administrator."	Generic licensing failure.

Program Window

Error Text	Reason/When it happens
"Failed to establish the path specification for this program's Help file. This program will continue to run, but no Help will be available."	pw.chm file cannot be located.
"The index of the item at fault is 'n'"	This is generic secondary error information. No longer used for registered applications, but may be used to point out a particular command-line argument or an entry in the list view that had problems during a refresh.
"Failed to recognize the specified item as among those that you are cleared to launch."	• The specified application or document may not exist. • The user may not have rights to run the application. • The name of the application may be misspelled on the command-line.
"Failed to open the registry "installed items" key for an attempt to count its subkeys."	The list of registered applications does not exist. The FH Web Server may not have been installed correctly.

Connection Manager

Error Text	Reason/When it happens
"You must specify all fields, with the exception of the command-line options field."	Complete all fields with the relevant data in the Add Application or Application Properties dialog, with the exception of the command-line options field. Command-line options are optional.
"You may not specify properties for system groups."	Do not change properties for User/Group NT AUTHORITY/SYSTEM.
"Only Administrators may access this application."	You must be validated on the selected server as an Administrator.
"Unable to obtain list of applications from the FH Web Server."	• On program launch, when the Connection Manager requests the registered applications from the Application Publishing Service • On program refresh, if the Applications tab is selected • If you are renaming/duplicating an application and the Application Publishing Service does not reply to the same request
"Unable to obtain the list of processes running on the FH Web Server."	• On program launch when the Connection Manager requests the registered applications from the Application Publishing Service • On program refresh, if you have either the Sessions or Processes tab selected, and Application Publishing Service doesn't reply to the same request
"Unable to connect to the Application Publishing Service."	The Application Publishing Service is not responding.
"Unable to build tree containing the list of the FH Web Servers available on the network."	On program launch, Connection Manager attempts to build the tree of available servers, but an anomaly occurred with the Broadcast Manager.
"Unable to update tree containing the list of the FH Web Servers available on the network."	• On refresh, if the tree needed to be updated and something unexpected happened • If you changed to a different server, and something unexpected happened while the Connection Manager updated the icon for the server • If the Application Publishing Service sent a notification of a new host coming online, but something unexpected happened while updating the tree with that information
"Unable to communicate with the Application Publishing Service. Service may not be running. (Error %u)"	• The Application Publishing Service may not have been started. • Any time a failure occurred while the Connection Manager is communicating with the Application Publishing Service through its RPC layer. EID: %U" is actually "EID: ###" where "###" is the error ID. The "###" indicates which RPC call failed.
"Unable to obtain this user's startup properties for the selected application."	Attempt to obtain the user information for the selected application failed. This is called when you choose to edit a user's setting from a particular application.
"Unable to obtain this group's startup properties for the selected application."	Attempt to obtain the group information for the selected application failed. This is called when you choose to edit a group's settings from a particular application.
"Unable to determine if this user/group name is located on the domain or on the local machine."	Attempt to obtain the user (or group) information for the selected application failed as it tried to determine if it was a network group instead of a user. This is called when you choose to edit a group's or user's settings from a particular application, or when you select a new application from the list of registered applications.

Connection Manager (continued)

Error Text	Reason/When it happens
"Unable to add this user's startup properties for the selected application."	Failed attempt to create settings that are non-default for a particular user for the selected application.
"Unable to add this group's startup properties for the selected application.	Failed attempt to create settings that are non-default for a particular group for the selected application.
"Unable to obtain security information for the selected application."	Attempt to obtain the user (or group) information for the selected application failed as it tried to get a list of all the users/groups associated with that particular application.
"Unable to obtain Server Options."	Attempt to update the Server Options dialog by selecting Tools > Server > Options failed.
"Unable to set Server Options."	Attempt to update Application Publishing Service by pressing "ok" in the Server Options dialog failed.
"Unable to duplicate application. Original application contains invalid startup properties."	Attempt to update Application Publishing Service by duplicating a current application failed.
"Unable to rename application. Original application contains invalid startup properties."	Attempt to update Application Publishing Service by renaming a current application failed.
"Unable to add specified Session Name."	An attempt was made to update the server tree with a session that was just started, and broadcast to the network failed.
"Selected file is not a 32-bit application or is not associated with one in the Windows Registry. This product supports only 32-bit applications.	An attempt was made to add or edit an application that is not a 32-bit application.

Client Printer

Error Text	Reason/When it happens
"The specified client printer configuration could not be deleted."	Attempt to delete the selected printer configuration failed due to an error.
"A client printer could not be configured to your specifications."	Possible attempt to configure a printer failed due to an error.
"The client printer configuration could not be updated to your specifications."	Updating the selected client printer configuration failed.
"There are no client printers to configure."	Be sure to add at least a single client printer.
"A test page could not be output to the specified client printer."	Valid error occurred while trying to print a test page with the selected client printer.
"Failed to configure a client printer. The problem is explained in your system administrator's log file."	• No printer drivers are installed on the server. • Printer options that are enabled in the Connection Manager do not allow the user to configure or upload printer driver(s) to the server.